The Future of Back-to-School
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VISA

In the annual cycle of our lives, parents experience a number of major celebrations and challenges, not least of which is the back-to-school period, when our families' lives shift dramatically.

Going back-to-school is an exciting time for children. However, it can also be a very stressful time for parents due to changes to schedules, adapting to new routines, and children needing new clothes and supplies. All of this has to be done while juggling competing priorities. Indeed, 52% of Canadian parents say the back-to-school period is stressful for them and their families, behind only the Christmas/winter holiday season.

There is promise, however, in progress. New technologies, new payment methods, and innovations across many aspects of our lives are all helping to simplify how we plan, purchase and prepare for daily life activities, including the return to the classroom. This progress in turn allows us to live richer lives, spending less time and energy on practicalities.

It is valuable to look into the future, to enable us to envision what might be possible tomorrow. As a futurist I follow trends, delve into technological and social developments, study the human systems in which we work, and apply structured methodologies to provide glimpses into what might come to pass.

In this brief report I explore some of the ways in which innovations in the decade to come may make the back-to-school period less stressful on parents and their families. About two-thirds of Canadian parents have expressed interest in many of the innovations mentioned in this report, and up to eighty per cent believe many of these are likely to come to fruition in the next decade.

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A Better Future:
Clothes Shopping

Home body scanning

Smartphones will be able to scan our bodies to identify clothes sizes, and integrate with other devices to show what we would look like wearing the styles available. A simple approval will enable delivery of the selected clothes.

Biometric payments

Payments will be extremely easy and highly secure, drawing on unique personal identifiers such as voice, fingerprints, or even thought patterns to authenticate you and swiftly approve your transactions.

2014

- Need to measure sizes of rapidly growing children.

- Often need to travel to visit stores, sometimes different ones for each child.

- Correct sizes may not be available in-store.

- When clothes are bought online, they often aren't the correct fit and have to be returned.

2024

Françoise called out to the boys, "Let's get you scanned for your school clothes!" Michel held up the calibration page his mother had printed out. She pointed her smartphone at him until it beeped, then scanned his older brother Patrick.

They turned to their big-screen TV, which showed their measurements and how much they had grown over the last year.

"I'm catching up with you!" said Michel. "You're mainly getting bigger around the waist as far as I can see," retorted Patrick.

While their mother went back to her work, the boys swiped their fingers in the air to flip through images on the TV screen showing what they would look like wearing the different style options available to fit their expected growth in the year ahead.

When they had made their choices, Françoise came back into the room, checked she was happy with the styles and prices, and said "Agreed", authenticating payment through recognition of her voice patterns.

"Your clothes will be delivered next Monday between 9:20am and 9:30am," the TV said.

A Better Future:
Buying School Supplies

Avatar assistants

Video avatars that look and act almost like real people will answer our questions and act as easy, natural interfaces to the rich resources of a digital world.

2014

- A wide variety of stationery and books are required, often needing multiple shop visits.

- Physical books need to be bought and carried to and from school.

- Often no specific suggestions are provided on what stationery and supplies children require.

2024

After Harpreet had arrived home, hugged his children, and finished a chapter of the novel he was reading, his smartphone buzzed. He pulled it out to see a message; 'Now seems like a good time to order school supplies for your children. Would you like to do this now or should I remind you later?'

He knew his virtual assistant had assessed his schedule and likely mood to suggest doing this now. As usual it had guessed well, so he asked it to proceed.

After a moment his assistant told him: 'Arjun's current tablet meets school standards for this year. However, Sara needs a new tablet. Here are the recommended systems sorted by price and peer reviews.' Harpreet approved payment for the first one on the list by putting his fingertip on his phone.

The phone continued: 'These are the textbooks Arjun and Sara need. Would you like to approve the purchase and automatic download?' Harpreet again authorized the purchase.

The digital assistant then accessed the data chips in his children's equipment. 'Arjun's bag may break in the next two months, would you like to replace it now?'

He asked his assistant to recommend bags of the right size costing less than $60.

"Arjun, look at your tablet and choose which bag you'd like." On his screen he flicked the selection towards his son, who could then see the list on this tablet. Arjun looked through and chose one for next-day delivery. Harpreet approved it with his fingerprint and returned to his novel with a smile.

A Better Future:
Food for School Lunches

Efficient deliveries

Buying goods and groceries will be transformed by efficient delivery mechanisms, including high-speed logistic hubs, crowd sourced delivery networks, and drones.

Interactive screens everywhere

Screens used for everything from entertainment to work will not just be on TVs and smartphones, but also on tabletops, kitchen benches, and sometimes encompassing entire walls in houses, controllable by voice and gestures.

2014

- Need to plan nutritious school meals, create shopping lists, and buy food on a timely basis so that it is fresh for school.

- It can be hectic and time-consuming to prepare meals in the morning.

- Difficult to reconcile children's and parents' preferences.

- Purchasing food that does not get eaten can be wasteful.

2024

"OK, time to pause viewing, let's plan your school lunches for this year," said Feng.

With a few one-word commands, he turned off the cartoon on the full-wall screen in their living room, replaced it with a realistic image of a helpful young man, and turned off the hand-held screens of young Mei and Aileen.

He asked for nutritious school lunch suggestions. In response to questions from the assistant, Feng said that faster morning preparation time was a higher priority than cost.

A dozen suggested lunch and morning snack combinations appeared, each including a balanced range of food to suit the girls and their dietary profiles.

"Which ones look good?" Feng asked. The girls selected their preferred meals by using their fingers to point at the screen. A list appeared showing which groceries would be required, together with the cost and regular delivery options that would ensure the food was fresh. Feng used his unique voice pattern to authenticate his regular payment and choose his delivery method.

A Better Future:
Planning Extra-Curricular Activities

Intelligent recommendations

We will authorize systems to access and take into account our previous activities, preferences, interests, social relationships, personality profiles, and schedules to recommend classes, extra-curricular activities, reading, and even potential friendships.

2014

- Hard to discover all local options for extra-curricular activities.

- Don't have suggestions for what would suit children or match them with interests and friends.

- Need to work out how activity schedules match with parents' commitments and movements.

- Often many different payments required for teams, classes, and necessary equipment.

2024

Olivia sat down with her father Peter after they had cleared the table following their evening meal.

"Let's have a look at what you can do this coming school year," he said. He touched the side of the dinner table and it turned into an interactive screen.

"I loved doing basketball last year," said Olivia, "but my two best friends are leaving the team. Maybe I should try another sport?"

"Let's see," Peter said, touching the table. "Can you approve the system linking to your social network?" Olivia put her palm down to approve the link.

The table accessed Olivia's profile and displayed information about a local soccer team and the school volleyball team, highlighting Olivia's closest friends who were team members, and showing the training and game schedules. Peter put down his palm to link the system to his calendar, showing no major schedule conflicts. Olivia decided to join the soccer team, and Peter authorized the activity and scheduled payments for the team and required sports gear.

"I dropped piano lessons two years ago, but I want to start again, is there a way I can do that?" asked Olivia. Peter tapped on the touch-table and the system showed a number of options, including a highly recommended teacher offering after hour classes at her school on Mondays, which would allow her father to pick her up after work.

He approved her sign-up for the piano classes. "I look forward to hearing more live music at home," he smiled.

A Better Future:
Travel to School

Driverless cars

New legislation may enable driverless cars to ferry our children and neighbouring friends to school, sports, and social activities safely, efficiently, and inexpensively.

2014

- Driving to school during rush hour is time-consuming.
- Taking children to school can conflict with work commitments.
- Depending on where they live and their age, not all children can take public transit to school.

2024

"Well, this is a first, excited about going back to school!" smiled Valerie.

Ben, Emily, and Catherine were rushing out as their driverless taxi arrived, one of the first in the city.

Last night their father, Charles, had established a daily order for the taxi, which he programmed to drop the children at each of their schools. He used the personal authentication embedded in his computer to easily approve the regular payments.

"I'm certainly glad not to have to spend an hour driving you all to school every day, but I do hope it brings you home safely," said Charles.

"Hey, it has to be safer than having you as a driver Dad!" laughed Emily.

The children got into the car, taking photos and sharing them on their social networks.

The children waved to their parents as the zero-emissions car drove off, then turned to the screens in front of the seats.

"Oh no!" said Catherine. "Dad has only given us access to our school work!"

They soon found themselves immersed in the fun, interactive preparatory lessons.

The car dropped off the children at their respective schools.
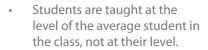
A Better Future:
Classrooms

Networked learning

As schools shift to prepare children for a dramatically different and highly dynamic world of work they will adopt new approaches to education including: highly individualized learning programs, studying with peers who have similar learning styles, drawing on global specialized teachers for lessons, and student-directed learning.

2014

- Students are taught at the level of the average student in the class, not at their level.

- Teaching doesn't take into account personal learning styles.

- Learning is competitive, not collaborative.

2024

Two weeks before the start of school, Chloe had followed the request to log on to the school system.

'You are in the Granada study team. Say hi to your fellow team-members.'

She looked at the profiles of the other students, one in Canada and others around the world, who had been matched with her as having complementary learning styles. She recorded and posted a brief video to introduce herself to her fellow team members and looked at the task they were to work on together.

On her first official day back at school, Chloe arrived in her math class to find no teacher but a screen covering the full height of the wall with a life-sized image of a young teacher from another city, selected as one of the best in Canada in her field.

"Good morning class," the teacher smiled. "Today, you are going to start learning about quadratic equations. Please begin by doing the 5-minute test on your tablet." After the brief test the teacher smiled.

"You have been put into groups of four, as shown on the screen. Go to the correct table and start working with your team on the tasks that appear on the tabletop screen."

As the small groups worked on their customized learning programs, a video image of the remote teacher appeared at each table in turn, to answer questions and help each group.

Chloe felt good about her math class: quadratic equations were challenging but interesting, and even on the first day she was really beginning to understand them.

A Better Future:
Financial Decisions

Visual personal budget analysis

Innovative and attractive ways to
display and discuss family budgets
and the implications of financial
decisions large and small.

2014

- It is difficult to track budgets and the impact of seasonal spending.

- There are no easy ways to compare options for spending and personal budgets.

- The long-term impact of spending and investment decisions is difficult to take into account.

2024

"Let's look at our finances after dinner, darling," Julie said. "Yes, it's time for that," responded Mark.

As their children played educational games with their robot tutor, they sat down in front of their living room entertainment screen.

"Show monthly finances," said Julie, prompting a colourful analysis on the screen of their income, spending, and saving over the past year.
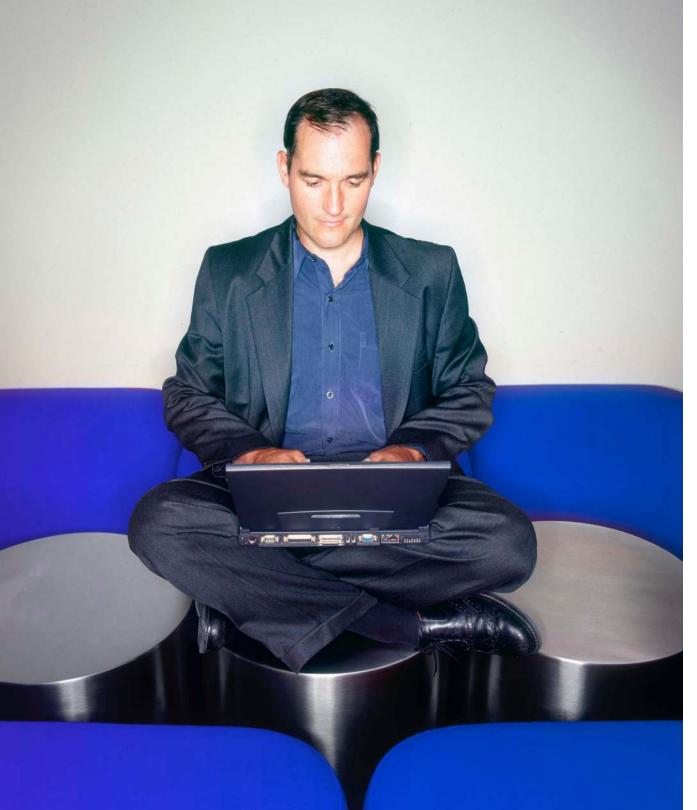
"Show impact of forecasted school-related costs."

The chart extended to show their finances for the next few months, with expected school spending highlighted.

Over the next few minutes they explored the impact on their budget of different options, including travel by car or public transport, clothing choices, and possible sports activities for the children. They agreed on a total budget for school spending, which would be used to provide immediate feedback on whether it fit whenever they made any spending decisions over the next weeks.

"Let's look at their post-secondary funds," said Mark. The parents looked at forecasts for their children's education funds over the next 10 years, including the impact of a ski trip they were considering for January. After looking at a variety of options, they decided to reduce their eating-out budget and increase monthly contributions to the post-secondary fund. They both said "Approved" to authorize the monthly payments into the fund from their joint account.

"It's a good thing Rosie will remind me when we can afford dinner out!" laughed Mark, referring to his intelligent assistant.

Conclusion

Looking to the future allows us to envision the possibilities that could help make our lives easier at all times, including during the back-to-school time period.

Innovation comes from conceiving what may be possible and worthwhile, and bringing it to reality.

Through my work I have seen that many companies around the world are currently developing technologies that underpin the scenarios described in this report. As they receive feedback on what you want – and do not want – it helps them to shape their innovations and bring the most promising and useful prospects to fruition.

About Ross Dawson

Ross Dawson is globally recognized as a leading futurist, keynote speaker, entrepreneur, and author. He is the Founding Chairman of four companies including leading future think-tank Future Exploration Network, and the bestselling author of four prescient books including Living Networks, which anticipated the social media revolution.

Strong global demand has seen Ross deliver keynote speeches in 27 countries across 6 continents, with frequent media appearances around the world including CNN, Bloomberg TV, SkyNews, ABC TV, Today and Sunrise shows, The Guardian, and many others.